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JC10 Rec'd PCT/PTO 24 JAN 2002

FORM PTO-1390 (REV 11-2000) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER GH 02010
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/031969
INTERNATIONAL APPLICATION NO. PCT/AU00/00803	INTERNATIONAL FILING DATE 30 JUNE 2000 (30.06.2000)	PRIORITY DATE CLAIMED 27 JULY 1999 (27.07.1999)
TITLE OF INVENTION	CONTAINER HANDLING APPARATUS OR CRADLE	
APPLICANT(S) FOR DO/EO/US	SCHMIDT, Hans Heinrich	

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. [X] This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.

2. [] This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.

3. [X] This express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.

4. [X] The US has been elected by the expiration of 19 months from the priority date (Article 31).

5. [X] A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 a. [X] is transmitted herewith (required only if not transmitted by the International Bureau).
 b. [X] has been transmitted by the International Bureau. (Not Known)
 c. [] is not required, as the application was filed in the United States Receiving Office (RO/US).

6. [] An English language translation of the International Application as filed (35 U.S.C. 371(C)(2)).
 a. [] is attached hereto
 b. [] has been previously submitted under 35 U.S.C. 154(d)(4).

7. [X] Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 a. [] are transmitted herewith (required only if not transmitted by the International Bureau).
 b. [] have been transmitted by the International Bureau.
 c. [] have not been made; however, the time limited for making such amendments has NOT expired.
 d. [X] have not been made and will not be made.

8. [] An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).

9. [] An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).

10. [] A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern other document(s) or information included:

11. [] An Information Disclosure Statement under 37 CFR 1.97 and 1.98.

12. [] An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

13. [X] A FIRST preliminary amendment.

14. [] A SECOND or SUBSEQUENT preliminary amendment.

15. [] A substitute specification.

16. [] A change of power of attorney and/or address letter.

17. [] A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825.

18. [] A second copy of the published international application under 35 U.S.C. 154(d)(4).

19. [] A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

20. [X] Other items of information: (a.) International Search Report
(b.) International Preliminary Examination Report

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U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/053969	INTERNATIONAL APPLICATION NUMBER PCT/AU00/00803	ATTORNEY DOCKET NUMBER GH 02010

21. [X] The following fees are submitted:	CALCULATIONS	PTO USE ONLY
BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):		
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by EPO or JPO.....**$1040.00**		
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO.....**$890.00**		
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO**$740.00**		
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)**$710.00**		
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT article 33(1)-(4) **$100.00**		
ENTER APPROPRIATE BASIC FEE AMOUNT =	$ 1,040.00	
Surcharge of $130.00 for furnishing the oath or declaration later than [] 20 [X] 30 months from the earliest claimed priority date (37 CFR 1.492(e)).	$ 130.00	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
TOTAL CLAIMS	11 -20=	0	X $18.00	$	
INDEPENDENT CLAIMS	1 - 3=	0	X $84.00	$	
MULTIPLE DEPENDENT CLAIM(S) (IF APPLICABLE)			+ $280.00	$ 1,170.00	
TOTAL OF ABOVE CALCULATIONS			=	$	
[X] Reduction by ½ for filing by small entity, if applicable.				$ 585.00	
SUBTOTAL			=	$ 585.00	
Processing fee of $130.00 for furnishing the English translation later than [] 20 [] 30 months from the earliest claimed priority date (37 CFR 1.492(f)).			+	$	
TOTAL NATIONAL FEE			=	$	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) **$40.00** per property			+	$	
TOTAL FEES ENCLOSED			=	$ 585.00	
				Amount to be: refunded	$
				charged	$

a. [X] Check no. 6154 in the amount of $ 585.00 to cover the above fees is enclosed.

b. [] Please charge my Deposit Account No. _____ in the amount of $_____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. [] The commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. _____. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

Send all Correspondence to:

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Michele K. Yoder
SIGNATURE

Michele K. Yoder
NAME

41,562
REGISTRATION NUMBER

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: TBA
	)	
Schmidt, Hans Heinrich	)	Examiner: TBA
	)	
Filed: To be determined	)	Attorney Docket: GH 02010
	)	
Serial No.: TBA	)	
	)	
For: CONTAINER HANDLING APPARATUS OR CRADLE	)	Date: January 24, 2002
	)	

HON. COMMISSIONER OF
PATENTS AND TRADEMARKS
WASHINGTON, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Prior to examination of the above referenced application please amend it as follows.

In The Abstract

Please replace the abstract with the following new abstract on a separate sheet as required by 37 CFR 1.72(b). The abstract has been amended to remove legal phraseology therefrom and to correct minor typographical errors. No new matter has been added. A marked-up copy of the abstract, labeled *Appendix A*, is attached with this communication.

Abstract

A container handling apparatus or cradle (10) is disclosed and which includes a main frame (11) adapted to be moved laterally from one side of a container (C) and over the container. Rams (19) are used to raise and lower the main frame to raise and lower the container suspended therefrom. Wheels (21) forming part of the apparatus or cradle, and positioned at the lower ends of the rams, are provided to move it around. The apparatus or cradle also includes members (22) for engagement by the tines of a fork lift truck to also allow the apparatus or cradle to be moved around.

In The Claims

Please amend the claims as follows.

Claims 1 and 10 are being amended to correct grammatical errors therein.

Claims 6-9 are being amended to eliminate the multiple dependencies therefrom.

Please delete claim 11. The International Preliminary Examination Authority determined that claim 11 did not comply with Rule 6.2(a) since it relies on reference to the description and drawings. This type of claim would also be unacceptable in the U.S. according to the guidelines set forth in 35 USC 112, second paragraph.

New claim 12 includes subject matter which was intended to be claimed in the original multiple dependent claim 6.

For the Examiner's convenience a complete copy of the claims to be examined are being reproduced below. Please note that claims 2-5 are not being amended. A marked up copy of the claims is attached with this communication and is labeled *Appendix B*.

1. (Amended) A container handling apparatus or cradle, including a main frame adapted to be moved laterally from one side of a container and over said container, means to raise and lower said main frame to raise and lower a container suspended therefrom, and means to engage the top and/or bottom of said container to attach said container to said frame.

2. A container handling apparatus or cradle as claimed in Claim 1, wherein means are provided to allow said apparatus or cradle to be moved around.

3. A container handling apparatus or cradle as claimed in Claim 2, wherein the means to allow said apparatus or cradle to be moved around are ground engaging wheels forming part of said apparatus or cradle.

4. A container handling apparatus or cradle as claimed in Claim 1, wherein said apparatus or cradle includes means for engagement by the tines of a fork lift truck to allow said apparatus or cradle to be moved around.

5. A container handling apparatus or cradle as claimed in Claim 1, wherein wheels forming part of said apparatus or cradle are provided to move it around, and wherein said apparatus or

cradle also includes means for engagement by the tines of a fork lift truck to allow said apparatus or cradle to be moved around.

6. (Amended) A container handling apparatus or cradle as claimed in Claim 3, wherein said wheels are carried by said means to raise and lower said main frame.

7. (Amended) A container handling apparatus or cradle as claimed in Claim 1, wherein said means to raise and lower said main frame are rams carried by said main frame.

8. (Amended) A container handling apparatus or cradle as claimed in Claim 1, wherein the means to raise and lower said main frame at least on one side of said apparatus or cradle are mounted on means coupled to said apparatus or cradle to allow said apparatus or cradle to be moved relative thereto, and means are provided to allow said relative movement.

9. (Amended) A container handling apparatus or cradle as claimed in Claim 3, wherein said wheels are self-propelled.

10. (Amended) A container handling apparatus or cradle as claimed in Claim 9, wherein an operator controlled steering

mechanism is provided for said wheels to steer the apparatus or cradle during its maneuvers.

12. (New) A container handling apparatus or cradle as claimed in Claim 5, wherein said wheels are carried by said means to raise and lower said main frame.

Remarks

The claims have been amended to remove the multiple dependencies therefrom. Claim 11 was determined to be indefinite by the International Preliminary Examination Authority and consequently has been deleted from the application.

All of the claims remaining in the application, namely claims 1-10 and the subject matter of new claim 12, were found to be novel, include an inventive step, and to be industrially applicable, in the International Preliminary Examination Report. However, should the Examiner determine that additional amendments are necessary in the application, he/she is encouraged to contact the undersigned Agent for Applicant.

In the event the Examiner has questions regarding this amendment or during the course of the examination and/or allowance of the application, he/she is invited to contact the undersigned agent for applicant by telephone at (412) 380-0725, if necessary to resolve any remaining questions or issues by interview and/or Examiner's Amendment as to any matter.

Respectfully submitted,
JAMES RAY & ASSOCIATES

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Appendix A

Abstract

A container handling apparatus or cradle (10) is disclosed and which[,] includes a main frame (11) adapted to be moved laterally from one side of a container (C) and over the container. Rams (19) are used to raise and lower the main frame to raise and lower the container suspended therefrom. Wheels (21) forming part of [said] the apparatus or cradle, and positioned at the lower ends of the rams, are provided to move it around[,and the]. The apparatus or cradle also includes members (22) for engagement by the tines of a fork lift truck to also allow the apparatus or cradle to be moved around.

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Appendix B

1. (Amended) A container handling apparatus or cradle, including a main frame adapted to be moved laterally from one side of a container and over said container, means to raise and lower said main frame to raise and lower a container suspended therefrom, and means to engage the top and/or bottom of said container to attach said container to said frame.

2. A container handling apparatus or cradle as claimed in Claim 1, wherein means are provided to allow said apparatus or cradle to be moved around.

3. A container handling apparatus or cradle as claimed in Claim 2, wherein the means to allow said apparatus or cradle to be moved around are ground engaging wheels forming part of said apparatus or cradle.

4. A container handling apparatus or cradle as claimed in Claim 1, wherein said apparatus or cradle includes means for engagement by the tines of a fork lift truck to allow said apparatus or cradle to be moved around.

5. A container handling apparatus or cradle as claimed in Claim 1, wherein wheels forming part of said apparatus or cradle are provided to move it around, and wherein said apparatus or cradle also includes means for engagement by the tines of a fork lift truck to allow said apparatus or cradle to be moved around.

6. (Amended) A container handling apparatus or cradle as claimed in Claim 3 [or 5], wherein said wheels are carried by said means to raise and lower said main frame.

7. (Amended) A container handling apparatus or cradle as claimed in [any one of the preceding claims] Claim 1, wherein said means to raise and lower said main frame are rams carried by said main frame.

8. (Amended) A container handling apparatus or cradle as claimed in [any one of the preceding claims] Claim 1, wherein the means to raise and lower said main frame at least on one side of said apparatus or cradle are mounted on means coupled to said apparatus or cradle to allow said apparatus or cradle to be moved relative thereto, and means are provided to allow said relative movement.

9. (Amended) A container handling apparatus or cradle as claimed in [any one of the preceding claims when dependent on 3] Claim 3, wherein said wheels are self-propelled.

10. (Amended) A container handling apparatus or cradle as claimed in Claim 9, wherein an operator controlled steering mechanism is provided for said wheels to steer the apparatus [of] or cradle during its [manoeuvres] maneuvers.

11. {Deleted}

12. A container handling apparatus or cradle as claimed in Claim 5, wherein said wheels are carried by said means to raise and lower said main frame.

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CONTAINER HANDLING APPARATUS OR CRADLE

Technical Field

This invention relates to a container handling apparatus or cradle, and more particularly an apparatus or cradle adapted to be interconnected to a shipping container whereby the container can be shifted onto and off the trailer (tray) of a truck at a shipping port, rail terminal and/or factory.

Background Art

Manipulation of containers is typically done by using fork lift trucks, side-lifters, mobile cranes or accessories such as portable lifting devices in the form of jigs and jacks which can be located on-site or carried with a container.

Fork lift trucks are very expensive equipment and are usually only available at well equipped sites, and are not necessarily available at many sites where containers need to be loaded onto and off the trays or trailers of road transports/trucks. Side-lifters are also only available at well equipped sites and due to their manner of operation require space equivalent to three times the width of the container. Mobile cranes on the other hand are also very costly installations and normally only available at sites dedicated to the handling of large numbers of containers, such as at a shipping port.

As an alternative to fork lift trucks, side-lifters and mobile cranes, portable lifting devices have been proposed, and such a lifting device is disclosed in International patent publication WO92/19527. However, the weight of a fully loaded container with such lifting

devices leads to instability when supported on a number of separate jacks at each corner of the container, and thus such devices are not a totally satisfactory solution to the problem of lifting and manoeuvring containers, whilst in addition, the lifting devices also require the services of a fork lift truck to position the devices for attachment to a container.

Other lifting devices that are known utilise a rigid chassis having a plurality of lifting jacks, and examples of these are disclosed in US patent publications nos. 3460697, 4053073, 3520433, 4522550 and 3152709. However, none of the disclosures in these publications provide a container handling system adapted to move a container, in particular the movement of a container once it has been elevated for loading onto transport. The ability to move containers small distances is a particularly important problem which has not been addressed by any of the prior art devices or systems presently available to handle containers. Furthermore, none of the known devices and systems are able to be attached to the top of the container such that a single container handling system or cradle can be used on multiple containers. An overhead crane can be used to fit such devices and systems to a container thereby avoiding the need for fork lifts or other types of mobile cranes.

Therefore, problems associated with loading and unloading containers onto and off the trays or trucks is only satisfactorily accomplished at very well equipped sites by the use of sophisticated and highly costly dedicated equipment. Moveover, the ability to manipulate, that is manoeuvre, containers small distances is only available with the use of the same equipment used for loading and unloading the containers.

Disclosure of the Invention

In accordance with the present invention there is envisaged a container handling apparatus or cradle, including a main frame adapted to be moved laterally from one side of a container and over said container, means to raise and lower said main frame and thereby to raise and lower a container suspended therefrom, means to engage the top and/or bottom of said container to attach said container to said frame. Preferably means are provided to allow said apparatus or cradle to be moved around.

Preferably the means to allow said apparatus or cradle to move around are wheels forming part of said apparatus or cradle.

Alternatively a fork lift truck or the like may be used to move said apparatus or cradle around, and said apparatus or cradle further includes means for engagement by the tines of said fork lift truck.

Brief Description of the Drawings

One preferred embodiment of the invention will now be described with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of the apparatus or cradle of this preferred embodiment of the invention and carrying a shipping container;

Figure 2 is a side elevational view of the apparatus or cradle of Figure 1;

Figure 3 is an end elevational view of the apparatus or cradle or Figures 1 and 2 carrying a shipping container out of alignment with the tray of a truck; and

Figure 4 is an end elevational view similar to that of Figure 3 having been adjusted to align the shipping container with the tray of the truck.

Best Mode for Carrying Out the Invention

In this preferred embodiment of the invention the apparatus, hereinafter referred to as a container cradle 10, is adapted to be clipped onto a shipping container C. The cradle 10 has a main frame, generally indicated as 11, and includes trapezoidal shaped end frames 12, having upwardly angled frame members 12a, vertical frame members 12b, and upper and lower horizontal frame members 12c and 12d respectively.

The lower horizontal frame members 12d are channel sections, and received therethrough are snugly fitting ram support beams 30 on which the main frame 11 as a whole can be moved laterally within the cradle in a manner to be later described. The main frame is completed by longitudinally extending beams 13 attached to the end frames via stub tubes 18 which can come in various sizes and which can be interchanged to accommodate different lengths of containers. The beams 13 consist of two parallel longitudinally extending top beams 13a and a single longitudinally extending bottom beams 13b at one side of the main frame, with the bottom of the other side of the main frame being open to allow the main frame to be laterally moved over the container C. Location pins 14 and locking devices 14a at the top and bottom of the main frame engaged with apertures within the container, whilst on the opposite side of the main frame locking device pillars 15 extend downwardly from beneath the end frames 12, and to which they are connected by connecting brackets 16. The pillars 15 receive further locking devices 17 which are movable longitudinally of the main frame to engage in apertures at the bottom end of the container at the open side of the main frames.

The ram support beams 30 carry telescopic rams 19 at either end, and at each of the four corners of the cradle. The cylinders 19a of the rams 19 extend upwardly from the ends of the beams 12 whilst the ram pistons 19b extend downwardly from the ends of the beams, and in this embodiment they carry at their lower ends yokes 20 carrying ground engaging wheels 21. The telescopic rams may be received within hollow square cross-sectional box sections surrounding the rams, and also telescopically slidable within each other as the rams are extended and retracted. These box sections, although not shown, will serve to provide additional rigidity and strength for the container cradle when carrying the weight of a shipping container and supported solely on the rams and their surrounding telescopic box sections. In addition, the yokes 20 may be pivotable about the vertical axes of the pistons for the purposes of allowing the cradle to be steered whilst being rolled around a site either with or without a container supported within the cradle. The cradle may be manually rolled around and steered on the wheels 21, or alternatively the cradle may be towed by a fork lift truck or the like, or even in another alternative embodiment the wheels can be motorised to be self-propelled and an operator controlled steering mechanism may also be provided whereby to steer the movement of the apparatus or cradle during its manoeuvres whereby to be self-steered.

A pair of parallel extending elongate tubular forklift tine receiving members 22 are provided midway along the lengths of the longitudinally extending top beams 13 of the main frame, and extending between the top beams, and which also receive the tines T of a fork lift truck F as shown in Figure 1. The positions of the tine receiving members 22 relatively to each other may be adjustable to accommodate different tine spacings when required depending on the forklift truck to be utilised to manoeuvre the cradle with or without a container supported therein. The

tine receiving members 22 also help to balance the cradle during manoeuvres with or without a container suspended therein as well as providing a large surface area for engagement by the tines.

The cradle either loaded or unloaded can be manoeuvred around a site on its wheels as described above, or by the fork lift truck F, if available on site, or a combination of both, or in an alternative embodiment when the rams do not have ground engaging wheels, but merely ground engaging base plates, manoeuvring would be accomplished only with the use of any available fork lift truck. The wheels or base plates may be attached to the lower ends of the rams by axially adjustable screw fittings to allow the height of the cradle at each of its corners to be adjusted as necessary with varying ground surface conditions.

With reference to Figure 2 of the drawings, when unloading a container C from the tray of a truck TT, the cradle, with rams extended, may be rolled over the top of the container on the truck tray or alternatively positioned over the top of the container by the fork lift truck F. The rams of the fork lift truck then lower the cradle onto the top of the container and the location pins 14a and locking devices 14b and 17 engaged with the container. Twist locks (not shown) are engaged with locking lugs TTa carried by the tray of the truck, whereafter the rams are again extended to lift the container from the tray of the truck. The cradle with the container supported therein is rolled laterally relative to the truck tray, or the truck can be driven away from beneath the container, which will be necessary in the case where the cradle is not mounted on wheels but merely mounted on ground engaging base plates. Once lifted up from, and then away from, the truck tray the container can then be lowered to the ground by retracting the rams 19.

In order to load the container C onto the tray of the truck TT, the sequence of events described above for unloading the container are reversed, with an additional event in the sequence of events being performed if necessary when the container is not correctly aligned with the truck tray, and which will now be described particularly with reference to Figures 3 and 4 of the drawings. In order to deal with such misalignment, horizontally orientated hydraulic rams 31 are coupled between the rams supporting beams 30 and the vertical frame members 12b of the end frames 12, and can be extended and retracted to shift the position of the main frame along the length of the ram support beams. With reference to Figures 3 and 4 of the drawings, in Figure 3 it will be apparent that the container C is not laterally aligned with the tray of the truck and in those circumstances, the horizontally orientated rams 31 are extended to laterally shift the position of the main frame and therefore the container within the cradle as a whole to the position shown in Figure 4 where the container is aligned with the tray of the truck and can therefore be lowered correctly onto the tray of the truck. As an alternative in a situation where the wheels 21 are steerable, and also possibly motorised, and as referred to previously, the wheels may be turned (steered) 90° to the length of the container and the cradle rolled or driven to align the container with the tray of the truck.

The cradle, when required to be moved from one site to another for use at different sites for use with the same or different containers, may be modular in construction whereby sections of the cradle can be disassembled and carried on top of the container as it is trucked from one site to another, or the modular sections can be transported separately on a different truck. Alternatively, connections between the various components of the cradle, including those of the main frame 11 and the

connections between the hydraulic raising and lowering rams 19 and the rams support beams 12, may, with appropriate locking devices, be hinged connections whereby the cradle may be collapsible to a substantially flat condition for transportation, rather than being disassembled.

The hydraulics for the cradle may be provided by an onboard power-pack P, or alternatively an external power-pack delivered to, or already existing at, the site. It is envisaged that with most loaded containers a standard fork lift truck with a 3 tonne, or above, capacity will be sufficient if a fork lift truck is required.

The cradle of this preferred embodiment of the invention when not used for handling and manoeuvring containers, can also be used for other purposes, such as a movable work platform, whilst, as it can be raised up to 1800mm above ground level, it can also be used for servicing and repair of equipment and machinery, for example, repairs to the undersides of containers.

Claims:

1. A container handling apparatus or cradle, including main frame adapted to be moved laterally from one side of a container and over said container, means to raise and lower said main frame to raise and lower a container suspended therefrom, means to engage the top and/or bottom of said container to attach said container to said frame.

2. A container handling apparatus or cradle as claimed in Claim 1, wherein means are provided to allow said apparatus or cradle to be moved around.

3. A container handling apparatus or cradle as claimed in Claim 2, wherein the means to allow said apparatus or cradle to be moved around are ground engaging wheels forming part of said apparatus or cradle.

4. A container handling apparatus or cradle as claimed in Claim 1, wherein said apparatus or cradle includes means for engagement by the tines of a fork lift truck to allow said apparatus or cradle to be moved around.

5. A container handling apparatus or cradle as claimed in Claim 1, wherein wheels forming part of said apparatus or cradle are provided to move it around, and wherein said apparatus or cradle also includes means for engagement by the tines of a fork lift truck to allow said apparatus or cradle to be moved around.

6. A container handling apparatus or cradle as claimed in Claim 3 or 5, wherein said wheels are carried by said means to raise and lower said main frame.

7. A container handling apparatus or cradle as claimed in any one of the preceding claims, wherein said means to raise and lower said main frame are rams carried by said main frame.

8. A container handling apparatus or cradle as claimed in any one of the preceding claims, wherein the means to raise and lower said main frame at least on one side of said apparatus or cradle are mounted on means coupled to said apparatus or cradle to allow said apparatus or cradle to be moved relative thereto, and means are provided to allow said relative movement.

9. A container handling apparatus or cradle as claimed in any one of the preceding claims when dependent on 3, wherein said wheels are self-propelled.

10. A container handling apparatus or cradle as claimed in Claim 9, wherein an operator controlled steering mechanism is provided for said wheels to steer the apparatus of cradle during its manoeuvres.

11. A container handling apparatus or cradle substantially as hereinbefore described with reference to the accompanying drawings.

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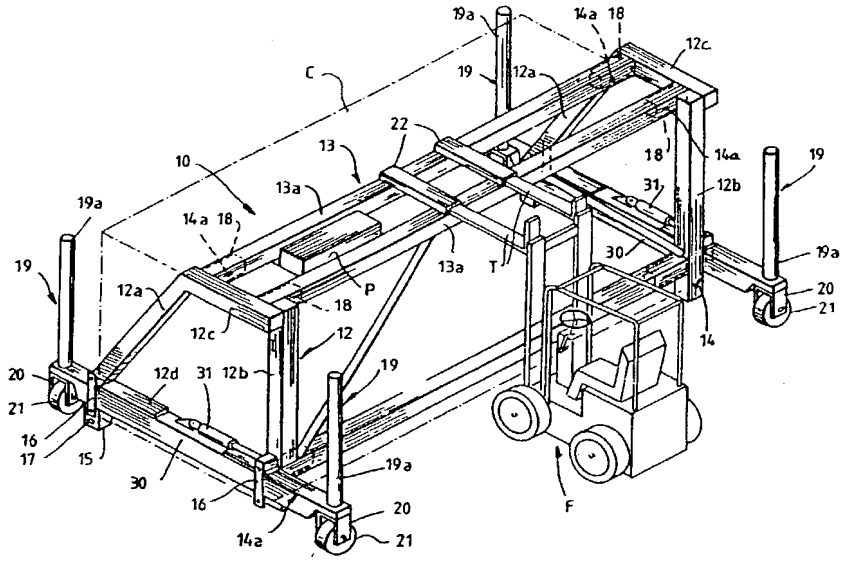
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Published:
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONTAINER HANDLING APPARATUS OR CRADLE



(57) Abstract: A container handling apparatus or cradle (10) is disclosed and which, includes a main frame (11) adapted to be moved laterally from one side of a container (C) and over the container. Rams (19) are used to raise and lower the main frame to raise and lower the container suspended therefrom. Wheels (21) forming part of said apparatus or cradle, and positioned at the lower ends of the rams, are provided to move it around, and the apparatus or cradle also includes members (22) for engagement by the tines of a fork lift truck to also allow the apparatus or cradle to be moved around.

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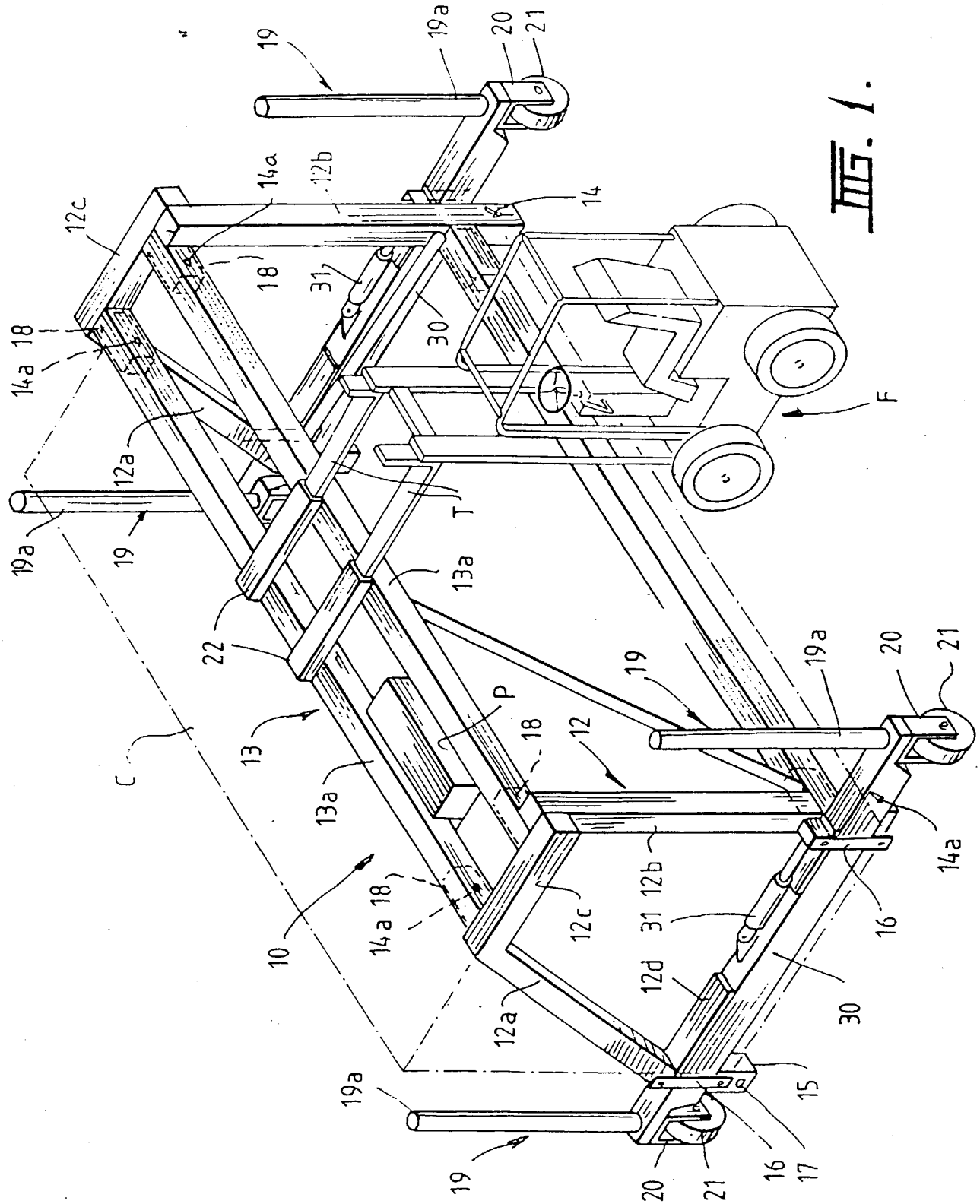

19
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21
14a
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FIG. 1.

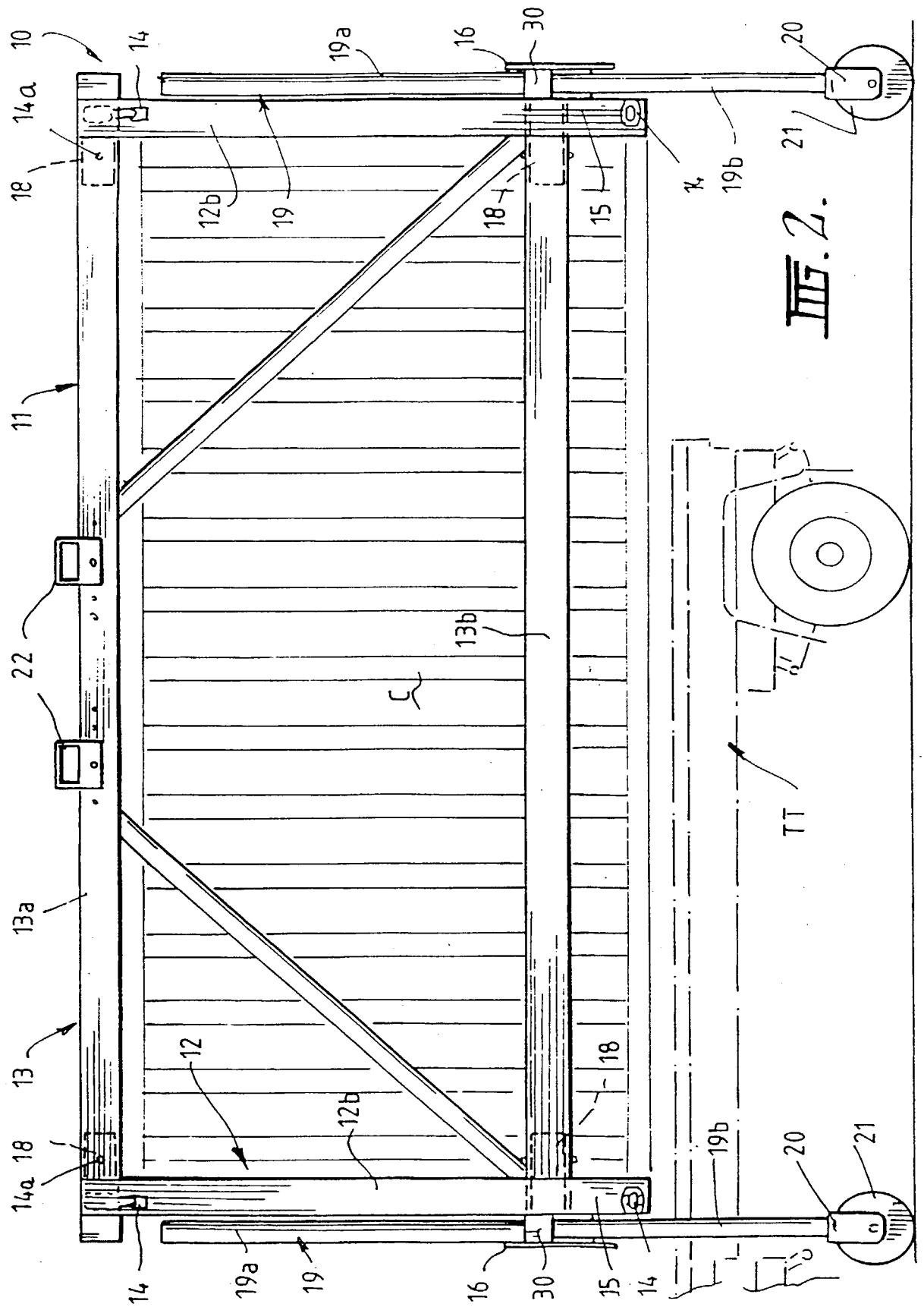

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FIG. 2.

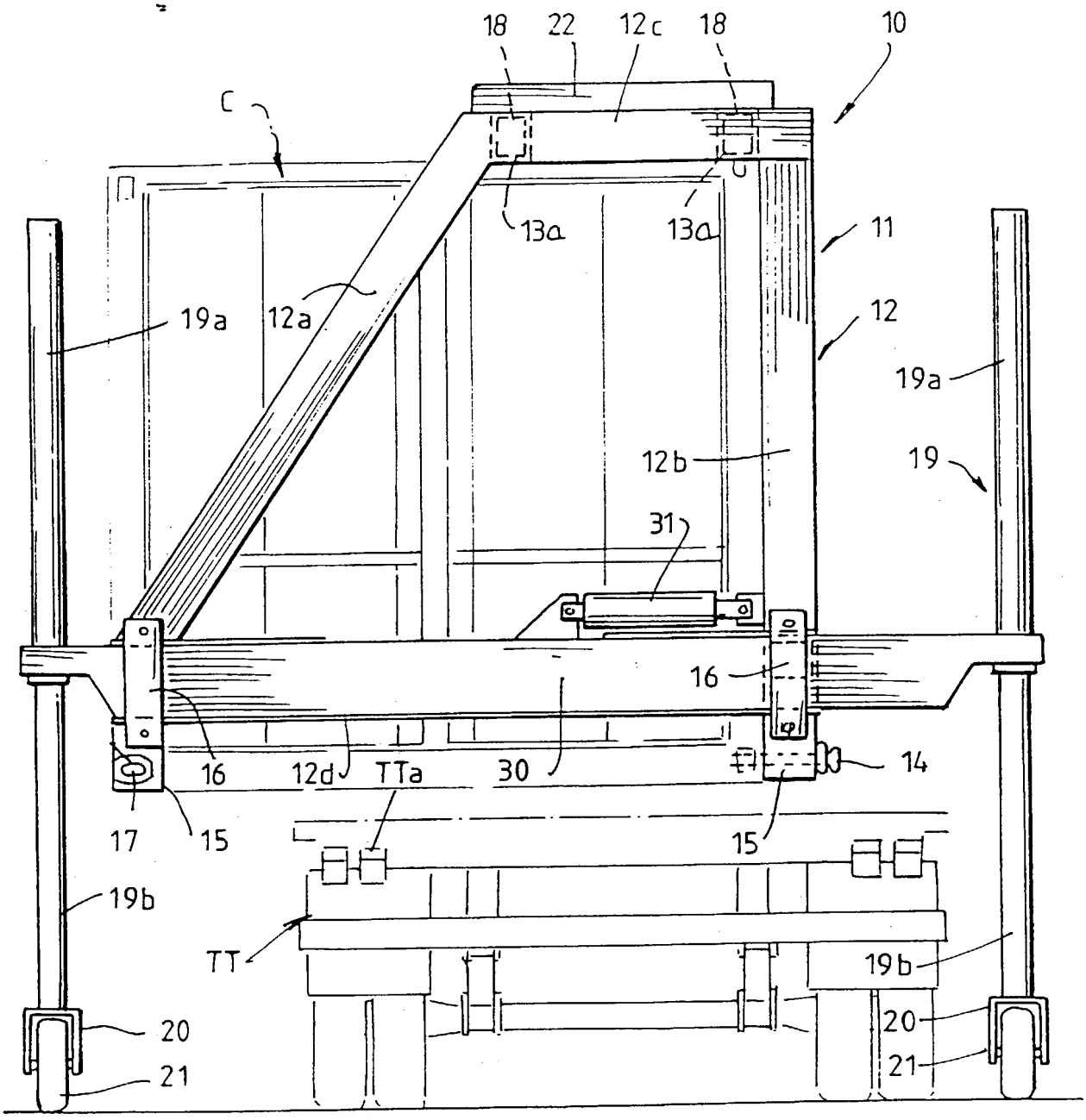

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FIG. 3.

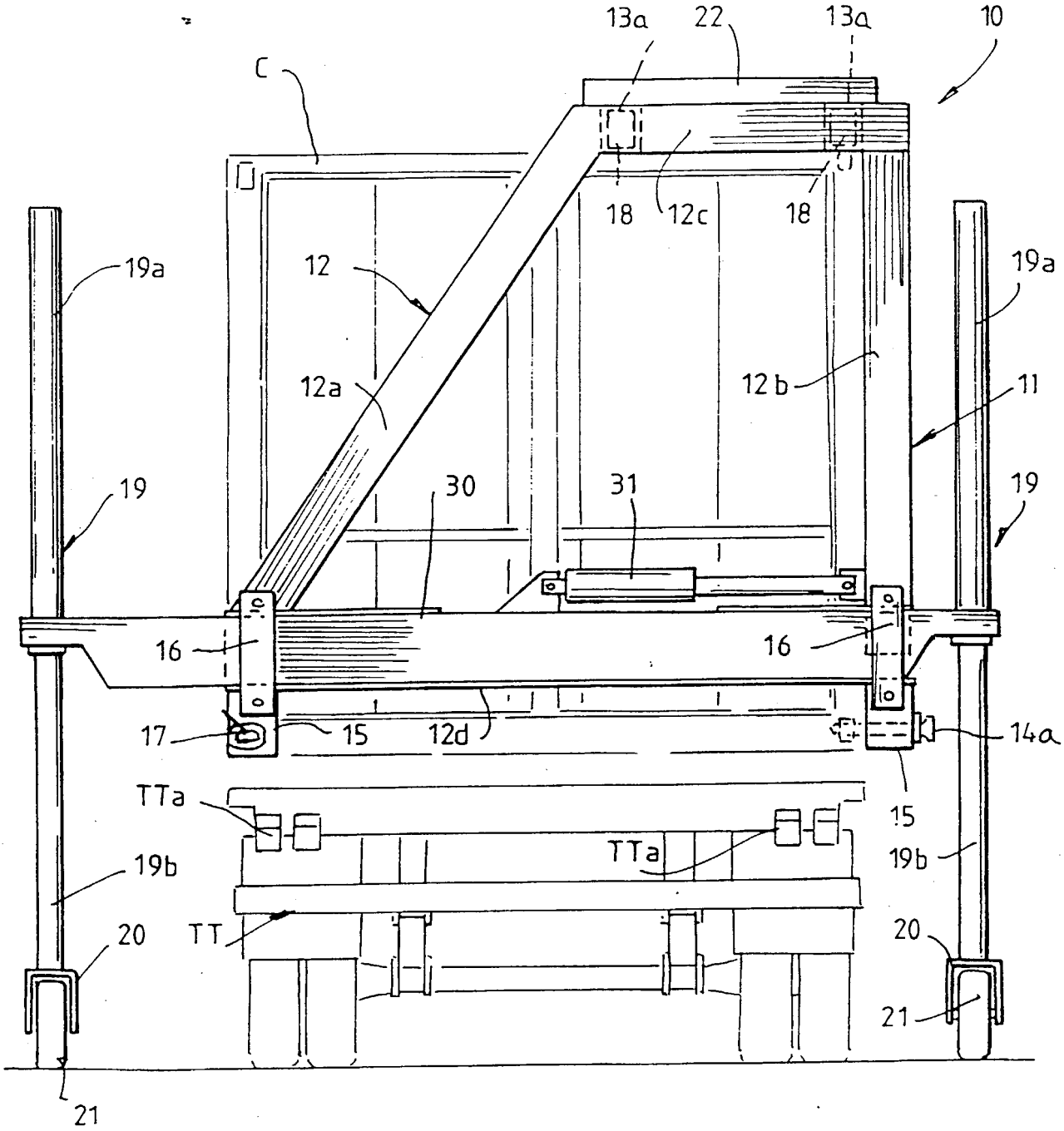

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TTa
TTa
19b
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FIG. 4.

10031969 .053102 #5

Attorney Docket No.: GH 02010

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PATENT & TRADEMARK OFFICE

Declaration For U.S. Patent Application

(PTO/SB/01)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

CONTAINER HANDLING APPARATUS OR CRADLE

the specification of which (Check one of blocks 1, 2 or 3)

1. [] is attached hereto.
2. [X] was filed on 30 June 2000 as International PCT Application Serial No. PCT/AU00/00803 and was amended on _____. (if applicable).
3. [] was filed on _____ as U.S. Application Serial No. _____ and was amended on _____.(if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed:

List of Prior Foreign Applications (if applicable)

(Application Number)	(Country)	(Day/Month/Year Filed)	CERTIFIED COPY ATTACHED?
PQ 1830	AUSTRALIA	27 JULY 1999	[] Yes [X] No
			[] Yes [] No
			[] Yes [] No
			[] Yes [] No

[] Additional foreign application numbers are listed on the attached sheet, PTO/SB/02B - Supplemental Priority Data Sheet or similar sheet.

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below:

List of U.S. Provisional Applications (if applicable)

(Application Number)	(Day/Month/Year Filed)

[] Additional provisional application numbers are listed on the attached sheet, PTO/SB/02B - Supplemental Priority Data Sheet or similar sheet.

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

List of U.S. Parent Application Or PCT Parent Numbers (if applicable)

(Number)	(Day/Month/Year Filed)	(Status: Abandoned; Pending; Patent Number, if applicable)

[] Additional U.S. or PCT international application numbers are listed on the attached sheet, PTO/SB/02B - Supplemental Priority Data Sheet or similar sheet.

(2)

And I hereby appoint as principal attorneys and agents, James O. Ray, Jr., Reg. No. 27,666; Forest C. Sexton, Reg. No. 22,054; John B. Sotak, Reg. No. 20,529; Gary J. Falce, Reg. No. 29,304; Amos Bartoli, Reg. No. 42,299; Michele K. Yoder, Reg. No. 41,562 and Robert A. Shack, Reg. No. 29,976.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true: and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 of Title and that such willful false statements may jeopardize the validity of the application or any patent issue thereon.

1-00

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Inventor's signature: _____ Date: _____

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(Street, City, State, Zip Code, Country)

Citizenship _____

Post Office Address _____

Full Name of Third Inventor: _____

Inventor's signature: _____ Date: _____

Residence: _____
(Street, City, State, Zip Code, Country)

Citizenship _____

Post Office Address _____

Full name of Fourth Inventor: _____

Inventor's signature: _____ Date: _____

Residence: _____
(Street, City, State, Zip Code, Country)

Citizenship _____

Post Office Address _____

[] Additional inventors are listed on the attached sheet, PTO/SB/02A - Supplemental Additional Inventor(s) Sheet or similar sheet.